U.S. Patent Application Serial No. 10/628,188 Fechko et al. Amendment and Response (Office Action of 05/02/2006) June 30, 2006 Page 2 of 12



## **Listing of Claims**

This listing of claims will replace all prior versions and listings of claims in the application.

1. (Currently Amended) A method of controlling the nitrogen content of a silicon carbide crystal grown by sublimation, the method comprising:

introducing an ambient gas eontaining consisting of hydrogen into a sublimation growth chamber holding a seed crystal;

heating a silicon carbide source powder to sublimation in the hydrogen ambient growth chamber while,

maintaining the silicon carbide source powder at a temperature of between about 2000°C and 2500°C and maintaining the seed crystal at a temperature of between about 50°C and 350°C lower than the temperature of the source powder, at which temperature sublimed species from the source powder will condense upon the seed crystal,

continuing to heat the silicon carbide source powder until a desired amount of silicon carbide crystal growth has occurred upon the seed crystal,

while reducing the amount of nitrogen incorporated into the growing silicon carbide crystal by controlling the hydrogen concentration in the ambient atmosphere of the growth chamber.

2. (Original) A method according to Claim 1 comprising introducing the ambient hydrogen into the growth chamber at a pressure of between about 0.1 and 50 Torr.